General Information About Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people such as those with cancer undergoing chemotherapy, who have undergone organ transplants, with HIV-AIDS or other immune system disorders, some elderly and infants can be particularly at risk of infections. These people should seek drinking water advice from their health care providers. To receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection, call the EPA Safe Drinking Water Hotline at 1-800-426-4791.

Water Quality Data

We routinely monitor for contaminants in Boulder's drinking water according to federal and state laws. The state of Colorado requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or because the system is not considered vulnerable to certain types of contamination. Some of the data, though representative, may be more than one year old. The data presented in this report are detected contaminants for the period of Jan. 1 to Dec. 31, 2010 or from the most recent testing done in accordance with regulations.

Health Information About Lead

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. You can minimize potential exposure to lead by flushing your tap for 30 seconds to 2 minutes before using tap water for drinking or cooking. More information is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.

Learn simple things you can do to save water by visiting bouldersaveswater.net and check out KeeptItCleanPartnership.org to learn how you can protect water.

Boulder's Water Sources

Barker Reservoir

The City of Boulder gets its water from Middle Boulder Creek, Barker Reservoir, the Silver Lake Watershed, North Boulder Creek, Lakewood Reservoir and western slope water from the Colorado-Big Thompson and Windy Gap Projects via Carter Lake, the Boulder Feeder Canal and Boulder Reservoir. Water at your home or business may come from any of these sources depending on season or availability.

The CDPHE has provided the City of Boulder with a Source Water Assessment Report for its water supplies. At this time, the Source Water Assessment Report is in the process of being updated. It will be available by calling the Colorado Water Quality Control Division at 303-692-3592 or by going to the Division's website, http://www.cdphe.state.co.us/wq/sw/swaphom.html. If you have questions about the city's water sources, please call the city's Drinking Water Program at 303-413-7400.

The sources of both tap water and bottled water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases radioactive materials, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source waters before they are treated include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural and livestock operations and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and also may come from gas stations, urban stormwater runoff and septic systems;
- Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, CDPHE prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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2011
CITY OF BOULDER
WATER QUALITY REPORT

Federal regulations require that this report be distributed to all of Boulder's water customers. Our goal is to provide you with safe and high-quality drinking water.

The City of Boulder's drinking water meets or surpasses all federal and state drinking water standards.

We hope you will find this water quality information useful. If you have any questions about this report, please contact Drinking Water Program Supervisor Michelle Wind at 303-413-7400 or the Colorado Department of Public Health and Environment (CDPHE) at 303-692-3500. More information about the City of Boulder's drinking water is also available at **www.boulderwater.net**

City of Boulder Water Resources Advisory Board meetings are also forums for the public to learn about drinking water. Meetings are usually held the third Monday of each month at 7 p.m. at 1720 13th St. More information about the board is available at www.boulderwater.net or by calling 303-441-3266.

PUBLIC WORKS
Water Quality & Environmental Services
Drinking Water

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

Turbidity

The City of Boulder water system violated a treatment requirement for turbidity (cloudiness) in January 2010. During a filter wash on 1/29/10 at 7:00 a.m., water treatment staff observed that a valve did not close as intended. Staff manually shut the filter valve to correct the situation. Turbidity levels reached up to 1.5 units, for less than 4 minutes, before the system was back in compliance. Normal turbidity levels at our plant are 0.05 turbidity units, and turbidity should not exceed 1 unit. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches. The city distributed the required notice of this violation to customers in March 2010.

Terms and Abbreviations

AL = Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL = Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG = Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL = Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG = Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant, below which there is no known or expected risk to health.

TT = Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

RAA = Running Annual Average: An average of monitoring results for the previous 12 calendar months or previous four quarters.

NE = Not Established

NTU = Nephelometric Turbidity Units

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (µg/l)

Contaminants Detected

Contaminant	Unit	MCL	MCLG	Result	Violation (Yes / No)	Sample Date	Typical Source of Contamination
Chlorine	ppm	MRDL = 4	MRDLG = 4	0.87 average 0.12-1.56 range	No	120 samples / month in 2010	Water additive used to control microbes
Barium	ppm	2	2	0.014 average 0.011 – 0.017	No	8/18/2010	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	ppm	4	4	0.85 average 0.08 – 1.11 range	No	daily	Erosion of natural deposits; water additive which promotes strong teeth
Sodium (not regulated)	ppm	NE	NE	4.9 average 2.9 – 6.8	No	8/18/2010	Erosion of natural deposits
Total Coliform	Absent or Present	No more than 5% of at least 120 samples can be positive	0	1 sample Present, All others Absent*	No	Monthly 2010	Naturally present in the environment

* Required repeat samples were all absent for total coliform bacteria.

Contaminant	Unit	TT Requirement	Level Found	Violation (Yes / No)	Sample Date	Typical Source of Contamination
Turbidity	NTU	Not to exceed 1 NTU for any single measurement	Highest single measurement: 1.5 Range: 0.01-1.5	Yes*	Daily 2010	Soil Runoff
	NTU	At least 95% of month's samples must be < 0.3 NTU	Lowest monthly percentage of samples meeting TT standard: 99%	No	Monthly 2010	

* See additional information on this volation under "Turbidity" (left)

Contaminant	Compliance Description	Requirement	Violation (Yes / No)	Sample Date / Year	Typical Source of Contamination
Disinfection Byproduct Precursors	The city used enhanced treatment to remove the required amount of natural organic material and/or demonstrated compliance with alternative criteria.	TT	No	Monthly 2010	Natural organic material that is present in the environment

Contaminant	Units	MCL	MCLG	Average	Range of All Samples	Highest RAA	Violation (Yes / No)	Sample Date / Year	Typical Source of Contamination
Haloacetic Acids	ppb	60	NE	44.92	14.9-123	47.45	No *	Quarterly 2010	Byproduct of drinking water disinfection
Total Trihalomethanes	ppb	80	NE	44.12	12.1-101	46.57	No *	Quarterly 2010	Byproduct of drinking water disinfection

* Compliance based on RAA

Contaminant	Units	AL	90th Percentile	Number of Sites over AL	Violation (Yes or No)	Sample Date/Year	Typical Source of Contamination
Copper	ppm	1.3	0.13	0	No	2008	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	ppb	15	3.05	0	No	2008	Corrosion of household plumbing systems, erosion of natural deposits